





# **Developing Functionally Safe & Secure Code?**

ARM together with the LDRA tool suite can make life easier

## Free SEMINAR with Hands-on session

### **Dates & Locations:**

Praha, Czech Republic - 24 Oct 2017 Brno, Czech Republic - 25 Oct 2017 Budapest, Hungary - 26 Oct 2017

Time: 09:00 - 16:00

#### **Overview**

Developing electronic systems to meet industrial (IEC 61508), medical (IEC 62304) or automotive (ISO 26262) certification standards has always been a non-trivial undertaking. The development processes, and the products developed under such processes, must meet high standards and are heavily scrutinised before eventually passing audits with independent certification authorities.

And then came the connected car, IoT, and IIoT. It is no longer possible to assume that such a system is secure because it is isolated. And an unsecure system cannot be a safe system if it is susceptible to aggressors.

A successful path to a completed certification would include applying pre-certified components and using advanced tooling to support the development processes, then creating the correct documentation and evidence needed for the certification.

During these free seminars, the attendees will get the chance to speak with experts and see how the ARM and LDRA solutions work together along with proven methodologies to simplify the functional safety certification. During the demonstration, various functional safety and security aspects of LDRA and ARM's capabilities will be explained. The hands-on sessions will start by importing Requirements and Test Cases from Word & Excel and can be done using either the Keil MDK with an STM32-discovery board or the ARM DS-5 with a VFP (Fixed Virtual Platform).

#### Who should attend?

Senior executives, technical managers, system architects, product managers, test engineers or anyone wanting a better understanding of developing safety certified systems along with the hardware and software ecosystem that combines to provide integrated and optimised application platforms with reduced certification risk and time-to-market.

#### **Presentations**

- Introduction to Functional Safety and Security
  - o What do the standards mean in practice?
  - o Static Code Analysis
  - o Dynamic Code Analysis
  - o Requirements Based Testing
- How does ARM support Functional Safety and Security?
  - o Safety features in ARM cores
  - o Safety qualification in the ARM Compilers
  - o Safety features in the ARM development platforms (DS-5 and MDK)
- Achieving Functional Safety and Security with the LDRA tool suite
  - o Part 1: Requirements based testing demonstration
  - Part 2: Hands-on seminar using the LDRA tool suite with either the Keil MDK or ARM DS-5

Agenda	
09:00	Registration and coffee
09:30	Welcome and introductions
09:45	Introduction to Functional Safety and Security
10:30	How does ARM support Functional Safety and Security?
11:15	Break
11:30	Achieving Functional Safety and Security using IEC 61508/ISO 26262/IEC 62304
13:00	Lunch
14:00	Achieving Functional Safety and Security using IEC 61508/ISO 26262/IEC 62304 (Part 2)
15:30	Wrap up and Q&A

For more than forty years, LDRA has developed and driven the market for software that automates code analysis and software testing for safety-, mission-, security-, and business-critical markets. Working with clients to achieve early error identification and full compliance with industry standards, LDRA traces requirements through static and dynamic analysis to unit testing and verification for a wide variety of hardware and software platforms. Boasting a worldwide presence, LDRA is headquartered in the UK with subsidiaries in the United States and India coupled with an extensive distributor network.

ARM (LSE: ARM, NASDAQ: ARMH.US) is at the heart of the world's most advanced digital products. Our technology enables the development of new markets and transformation of industries and society, invisibly creating opportunity for a globally connected population. We design scalable, energy-efficient processors and related technologies to deliver intelligence wherever computing happens, ranging from sensors to servers, including smartphones, tablets, digital TVs, enterprise infrastructure and the Internet of Things.

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